

# Universal RENAULT injection ECU decoding tool

## 1. Introduction

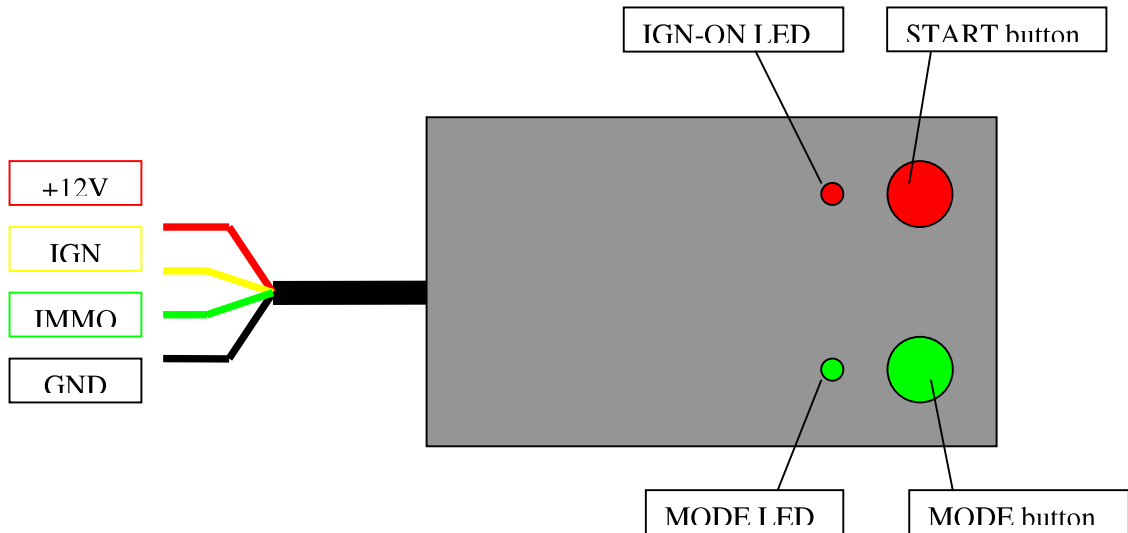
Have you ever seen where fuel injection ECU (Electronic Control Unit) on the Renault car is located? Yes, it is located in most vulnerable place in the engine compartment. In most cases even after medium-strength impact it became unusable because of mechanical damage and must be replaced. However from year 1994 most Renault cars are equipped with engine immobilizer system and it makes replacement of injection computer more complicated. There is no problem if replacement ECU is bought from Renault service dealer - it is sold with no immobilizer code stored, but replacing damaged computer with used one is impossible because of mismatch of unlocking codes.

And that was why an idea to create universal Renault ECU decoder revealed. Now if you have this tool you can take used injection computer and make it not coded as it was bought from Renault stores. Decoder has several modes of operation and covers all known petrol and diesel injection systems, introduced in range of year 1994-2001 *without intervention in to the ECU* (diesel coded anti-start valve as well). Systems, this tool was tested with, are listed below:

<i>Petrol</i>	<i>Diesel</i>
SIEMENS FENIX3	BOSCH MSA15.5 (DTI)
SIEMENS FENIX5	BOSCH EDC15C3 (DCI)
SIEMENS SIRIUS32	LUCAS DCU3R (1.9D)
SAGEM SAFIR (55pin)	Coded fuel cut-off valve (1.9D DDS)
SAGEM SAFIR2 (35pin)	
BOSCH MOTRONIC MP7.0	
MAGNETI MARELLI IAW 06R	

## 2. Operation

Front view of decoder presented in figure 1.



**Figure 1. Front view.**

MODE button is used to switch between operation modes. Mode can be changed only before pressing red START button. When decoding is in progress, MODE button becomes not operational.

There are 4 operation modes:

<i>Mode</i>	<i>“MODE” LED</i>
Standard	OFF
Advanced 1	ON
Advanced 2	Slow blinking
Semi-Auto (TYPE1 immo)	Fast blinking

All you have to do is connect decoder to the ECU you want to decode, according to connection diagram, select desired operation mode and press red START button. Which mode is to be selected depend on engine immobilizer type and several other factors, described below. Connect ground, battery +12V, MIL lamp and relay (if required). Use any 12V lamp (up to 2W), any relay with 12V coil and 12-14V power supply (over-current protection would be an advantage). Apply +12V IGN, lamp must blink. If lamp goes on and does not blink, ECU is already not coded or there is mistake in connection.

Connect decoder box as follows: red wire to ECU's +12V BAT, black wire to GND, yellow wire to ECU's +12V IGN (decoder switches +12V on and off by itself) and green wire to ECU's immobilizer input.